

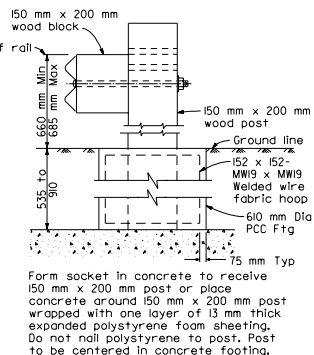


Technical drawing of a concrete pile cap assembly. The drawing shows a cross-section of the cap and its connection to a pile. Key components and dimensions include:

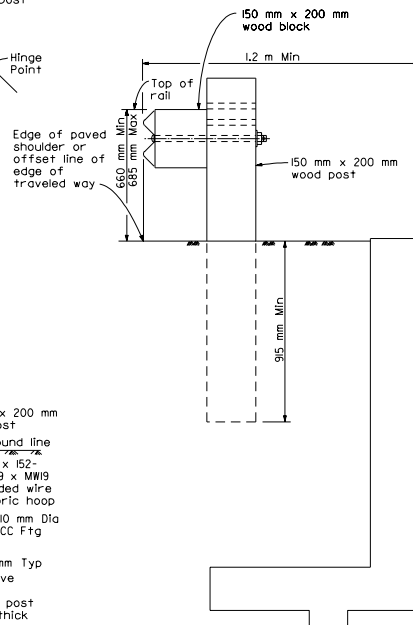
- 150 mm x 200 mm wood block**: Located at the top of the cap.
- Top of rail**: Indicated at the top of the wood block.
- Min 660 mm**: Dimension from the top of the rail to the top of the cap.
- Max 685 mm**: Dimension from the top of the cap to the top of the pile.
- 150 mm x 200 mm wood post**: Located on the right side of the cap.
- Ground line**: Indicated by a horizontal line with a triangle.
- 22 mm Ø Bolts @ 70 mm C-C Horizontal (Total 4) with hex nuts & washers**: Four bolts securing the cap to the pile.
- PL 305x50x10**: Dimension of the plate between the bolts.
- L 150x100x13x150**: Dimension of the plate between the bolts.
- Hex nut and cut washer**: Located at the bottom of the bolts.
- Grind top of exist Conc Ftg smooth or level with mortar pad as required**: Instruction for the top surface of the cap.
- 200**: Dimension from the center of the bolts to the center of the pile.
- 185**: Dimension from the center of the bolts to the center of the pile.
- 305**: Dimension from the center of the bolts to the center of the pile.
- Min 320 mm**: Dimension from the center of the bolts to the center of the pile.
- Max 335 mm**: Dimension from the center of the bolts to the center of the pile.
- 22 mm Ø x 200 mm Continuous threaded rod, drill and bond in 32 mm Ø x 150 mm hole, 4 per post**: Four rods securing the cap to the pile.

DETAIL C

See Note 4

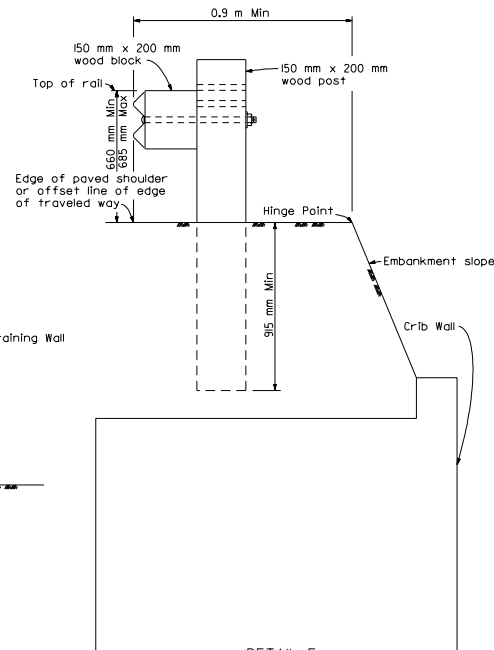


DETAIL D



DETAIL E

INSTALLATION AT EARTH RETAINING WALLS



DETAIL F

NOTES

1. For additional installation details, see Standard Plans A77A and A77AA.
2. For additional details of wood post and blocks, see Standard Plan A77C.
3. Where the distance between the face of the rail and the hinge point is less than 0.6 m, see the Project Plans for special details.
4. Use these post footings only where standard embedment of railing post as shown in Details A and B is restricted by underground concrete facilities such as footing of walls, columns, etc.
5. For dike positioning with guard railing installations, see Standard Plan A77F.



Coltrans
Metric

DIST	COUNTY	ROUTE	KILOMETER TOTAL	POST PROJECT	SHEET NO.	TOTAL SHEET

Ellis K. Hirst

REGISTERED CIVIL ENGINEER

July 1, 1999

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
ELLIS K. HIRST
No. C-17926
Exp. 6-30-01
CIVIL
STATE OF CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL LINE POST
INSTALLATION**

NO SCALE

ALL DIMENSIONS ARE IN
MILLIMETERS UNLESS OTHERWISE SHOWN

A77FA

1989 STD. PLAN A77FA